

## **Two-Tiered Pricing For Telecommunications Services**

The Defense Information Systems Agency (DISA) offers the following telecommunications services delivered through the following Defense Information Systems Network (DISN) products:

### **VOICE**

- *Defense Switched Network (DSN)*
- *Defense Red Switch Network (DRSN)*
- *Hawaii Information Transfer System (HITS)*

### **DATA**

- *uNclassified but sensitive Internet Protocol Router Network (NIPRNet)*
- *Secret Internet Protocol Router Network (SIPRNet)*

### **VIDEO**

- *DISN Video Teleconferencing Service*

### **TRANSPORT**

### **MESSAGING**

- *Defense Message System (DMS)*

DISN is driven by Joint Staff direction (the DISN Joint Mission Needs Statement [JMNS] and Joint Capstone Requirements Document [JCRD]) to provide interoperable, secure, economical telecommunications services to the Department of Defense (DOD). The existence of two funding mechanisms for networks within DOD (MILDEP and other agency networks are funded using the appropriated funding mechanisms while the DISN is funded under the DWCF), coupled with the failure to understand the DISN as a utility satisfying a broad range of military requirements, lead DOD to inefficiently provide telecommunications services and to problems with interoperability and security. DOD needs a rate structure for joint and enterprise telecommunications systems that incentivizes their use, that recognizes their use as military value added capabilities within the context of providing utility-like services for the common good and that promotes security, interoperability and efficient practices across DOD.

## **Two-Tier Pricing Methodology**

The proposed solution to this problem, supported by the DWCF Reform Task Force, DOD (PA&E), and the DOD-wide Global Network Information Enterprise (GNIE) Resourcing the Enterprise Working Group, is a two-tiered pricing approach. **Tier One** covers core infrastructure required to produce military readiness attributes of the enterprise solution. Tier One costs are to be recovered through a monthly recurring surcharge to the Service/Agency component level. **Tier Two** covers the remainder of network infrastructure costs associated with delivery of information services, and would be financed by usage and/or value-added service rates paid by the customer.

In order to accurately determine what should and shouldn't be considered for the split into the tiered rate structure, one must first remove from consideration those items under the CISA which are either non-rate based military capabilities or surcharge items. Those items are delineated below:

<u>Non-Rate-Based Military Capabilities</u>	<u>POM 01 Value (\$K)</u>
- DRSN	\$ 27,395
- DMS	\$ 56,327
- Commercial Satellite Communications Initiative (CSCI)	\$ 64,806
<u>Surcharge Items</u>	
- PBD417C Depreciation	\$ 95,200
- Universal Services Fee (USF)	
- Prior Year	\$ 36,400
- Current Year	\$ 30,800

That leaves the following items to be evaluated for the two-tier approach:

- DSN
- HITS
- NIPRNet
- SIPRNet
- Video
- Transport

In order to determine the appropriate split of DISN network services costs into the previously described tiers, each service was evaluated in regard to the following categories:

**Category 1: Availability, Capacity, Surge, Assured Service, Global Coverage**

This category accounts for the military readiness features provided as an outgrowth of the fact that the DISN is a capacity-based network. In other words, DISN has been sized appropriately (with enough spare capacity incorporated) to meet the Joint Staff validated requirements for availability and assurance of network services (to include transmission paths for redundancy and alternative routing), surge expected for the normal network customer base, and global coverage (ensuring every location that needs access to the network has access). This category has been calculated to represent 21% of overall network costs for the items under consideration for the two-tier split.

**Category 2: Security, Positive Control, MLPP, Reachback**

This category focuses on the incorporation of specific operational procedures, practices, and network resources (systems and personnel) required to provide Joint Staff mandated security, positive control, and other readiness features such as multi-level precedence and pre-emption. Some specific items covered in this category include real-time incident management and reporting, configuration management and vulnerability assessment, protected switching facilities, cleared personnel, encrypted network management links, and separate network management facilities. In addition, this category also covers the impact on the DISN of reachback capabilities required by the deployed warfighter (FY00 Joint Staff requirement of 102 MBPS per Joint Task Force). This category has been calculated to represent 15% of overall network costs for the items under consideration for the two-tier split.

**Category 3: Making Data Service Analogous To Commercial**

This category accomplishes two purposes. It modifies the DISN data services chargeback approach such that pricing to the end user will be an “apples-to-apples” comparison with industry pricing, while at the same time ensures that all necessary data service accesses (regardless of location or expense) are provided. This category has been calculated to represent 5% of overall network costs for the items under consideration for the two-tier split.

**Dividing the Service Level Bill**

Several different methodologies were evaluated for dividing the Tier 1 bill. Given the desired outcome of maximum usage of common user telecommunications services, it was determined that the methodology could not be usage based since 1) if usage drops to zero, there is still a bill to pay, and 2) a usage-based split would allow users to reduce their portion of the bill if their DISN usage decreases (actually rewards migration off of common user). Therefore, a reasonable approach, as recommended by the DOD Comptroller, is to base the Tier 1 split on Services' Total Obligation Authority (TOA), which would exhibit the following benefits:

- 1) Simplicity -- Specifically identified in DISA CSART assessment
- 2) Visibility at service level -- reinforces commercial pricing incentives
- 3) Services pay a DISN readiness bill independent of usage
- 4) TOA is directly related to military requirements and component readiness

### **Estimate of Tier 1 Bill Based On DOD(C) Guidance**

In response to a request from DOD(C), an analysis has been performed that bases FY00 expected revenue for the items under consideration for the two-tier split on a straight inflation percentage from FY98 actuals. It should be noted that using this approach, a considerable amount of anticipated growth in requirements for DISN services, currently reflected in POM 01, is not considered in determining the Tier 1/Tier 2 split. Sources of that growth include the following:

- Increased usage by current customers
- New requirements from new customers
- Increased common user requirements based on incorporation of independent Service/Agency networks into the DISN

The results of this analysis are found in the attached spreadsheet. Based on division of resulting Tier1 costs by TOA, the following would be an allocation of Tier1 costs to the Services and Agencies:

<b>If Tier 1 Allocated by TOA (FY00)</b>		
	<i>% Of Total</i>	<i>Share of Total (\$K)</i>
Army	25%	\$42,374
Navy	27%	\$45,455
Marine Corps	4%	\$7,071
Air Force	30%	\$49,877
Defensewide	14%	\$23,709
<b>Total</b>		<b>\$168,486</b>